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Making the Best Use of Bulletins, Radio, and Television*
by

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Do you remember the sure-fire system for killing potato bugs, as advertised by a get-rich-quick promoter of the early days?

His product, when delivered by mail, consisted of two small wooden blocks--and a simple set of directions: Catch the bug, place it on one block, clap the other block on top...and, presto, a dead potato bug.

Now, if dispensing information about entomology and plant pathology were always that simple, our difficulties would be few. But we've come a long way in these scientific fields...and so have the means of communicating with our public. Each year, new insects, new diseases, new insecticides and new fungicides pose new problems for entomologists, plant pathologists, editors--and, let us not forget, the public.

If, tonight, you are expecting to learn an easy, simple, general-purpose formula for making the best use of your bulletins, radio broadcasts and television programs, you're going to be disappointed. Just as you people maintain, and rightly so, that there is no magic compound for controlling all insects and diseases.....I must maintain that in developing mass communications materials we must deal with specifics rather than generalities.

Fortunately, however, there is one common denominator formula that is basic if we're to make profitable use of time, money and effort spent in mass media channels. There is nothing unusual about this formula--once you hear it, you'll say it's just common sense...but it took two home economists to spell it out. In their recent book, Writing for Homemakers, Lou Richardson and Genevieve Callahan established a four-word formula for successful writing, radio, television and related forms of communications.

Here is the formula: VISUALIZE, ANALYZE, ORGANIZE, DRAMATIZE!

Let's take this formula apart, word by word, and see what is meant.

By VISUALIZE, we mean to take a look at our intended audience for whatever it is we wish to produce. What problems does that audience have? Is there more than one audience? What interests the people who make up that audience? Where is that audience, geographically, economically, mentally? In your fields, I think you will find you have

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three general types of audiences:

1. Home gardeners, and homemakers.
2. Commercial producers of specialty crops.
3. General farmers.

By ANALYZE, we mean to think out clearly our means for reaching a specific audience, what the particular problems of a given audience are, and the willingness or interest of that audience to accept help on the problem. Do they read newspapers, magazines or bulletins? Do they listen to the radio, and, if so, to what programs and at what times of day? Do they have television? Do they attend meetings? Are they on established mailing lists for educational material? What are the relative costs of reaching the audience by various ways?

By ORGANIZE, we mean to take the information gained by VISUALIZING AND ANALYZING and thus determine the specific information you wish to get across to a particular audience. You have to decide, too, in what order the information will be presented, the point of view from which you will write or speak, and when to do it.

By DRAMATIZE, we mean the actual production of the material--whether it be a bulletin, news article, radio interview or television program. When we say to DRAMATIZE, we mean to bring to life, to make real, interesting and effective. If you have done a good job of VISUALIZING, ANALYZING AND ORGANIZING, the job of production--of DRAMATIZING--becomes much easier.....because now you know to whom you're writing, why it is to be done in a given way, and exactly what needs to be said. Now, all you have to be concerned about is how you will say it and the illustrations you will use. There is more to DRAMATIZING than this, but we'll talk about it more specifically as we take up the different media....for how you DRAMATIZE depends to a great extent on the media.

This then is the general formula: VISUALIZE, ANALYZE, ORGANIZE, DRAMATIZE! It's basic to everything you do, whether it be writing a bulletin, preparing a demonstration, or talking before a group. You can use it constantly in your work.

Now, if we're going to put this formula to work in helping us disseminate information, let's start first with bulletins. Bulletins, I'm afraid, have been pushed aside too frequently in favor of other, more glamorous forms of communications. But, let's remember that of all the things we do, the bulletin remains as the one piece of "take home" and "stay home" information that we have--it's a complete story, of permanent reference value, always ready to answer questions. This is not true of yesterday's newspaper, last month's magazine, or the radio program of 15 minutes ago. Newspapers, magazines and radio programs each have definite places in the information picture, but not as substitutes for the bulletin. As I've often told our specialists at Ohio State University, you get all the facts and figures about your subject down in bulletin form, and we'll figure out the ways we can adapt and use that information in other media.

Let's now take each of the three main audiences for your material and run through the formula to determine the type of bulletins required for each.

1. Home gardeners and homemakers are, first of all, busy people, interested in many things, and on garden or household insect problems, they want short, general, easy-to-use recommendations. They will make their wants known for such data by calling, writing or visiting the county extension office; or they may pick up an interesting leaflet or bulletin from a display at a fair, or at the point of sale of insecticides or fungicides. They will be most satisfied with the bulletin if it is organized to answer their problems directly, without too much background; they are more interested in the remedy than they are in identifying the trouble or its cause. They will want application units expressed in small quantities; ideas on how they can use equipment already at hand, and, if possible, will prefer a general-purpose formula to a lower-cost specific that may require more work on their part.

2. Commercial growers, however, are a completely different audience. They are in business to make money and know they must give attention to details of controlling insects and diseases. They want specific information, complete in every detail. Most of them can be reached through establishing mailing lists, at organized schools or clinics, and by visits of county agents and specialists to their farms. They are interested in learning how to identify insects and diseases; the relationship of sprays to cultural practices; specialized equipment needed; how to time sprays; specific sprays for specific problems; large quantity formula computations, and up-to-the-minute comments on new formulas, even though they may not intend to use them this year.

3. General farmers, on the other hand, perhaps are the hardest group to place in a single audience. But, I feel we can be safe in saying they want specific information for each crop, insect or disease; but want the data in short, easy-to-use recommendations. They often can be reached through regular mailing lists; through visits to the county extension office; at meetings or exhibits, and at point of sale of materials. Material for effective general farm use, therefore, must be a happy combination of specifics and generalities, all in popular language and presentation.

As we looked at these three audiences, I've purposely avoided discussing the fourth part of the formula--to DRAMATIZE, because how this is done depends upon several factors, not the least of which are these two:

1. Is the objective to arouse interest in a problem, or
2. To answer questions about a recognized problem?

In the first case, appeals may have to be made on the basis of economic gains to be made by controlling a disease or insect, while in the second case, the appeal may be to show how easily quality and quantity may be improved by a few applications of a dust or spray.

Usually, the problem with home gardeners is answering questions, although most are not alert to be many losses caused by insects or disease.

Commercial growers seek new solutions to old problems, and are also ready for alerts on new insects and diseases; while with the general farmer, we run the whole scale. For instance, it may be

1. Maintaining interest in old problems, such as treating wheat, or controlling cattle grubs,
2. Alerting to new problems, such as spittlebug in legumes, or a new strain of rust, or
3. Reminders on old problems, timely because of current conditions, such as need for treating stored grain.

All of these are basic to the problem of dramatizing. Here are other ways of dramatizing bulletins:

1. Use simple, effective language; write for the layman not another entomologist or pathologist.
2. Use good illustrations, charts, graphs, and photographs.
3. Use color, if the budget permits. Color can be used to help tell a story, or to arouse interest in a story.
4. Occasionally, try questions for chapter or paragraph headings.
5. Try the "you" approach in your writing.
6. Give your editor opportunity and time to work on the manuscript.

This requires planning. Plan manuscripts 6 months to a year in advance of need; confer with your editor during the period of preparation; let him have plenty of leeway on cover design and page arrangement; deliver manuscript to editor at least 3 months ahead of date needed.

All of us are concerned about the costs of bulletins, and there are ways to save and recover publication costs. These are our experiences in Ohio.

1. Don't try to cover too much territory in one bulletin.
2. Large reference volumes or bulletins can be sold.

Last year, when our funds would not permit publishing a revision of our 64-page fruit spray bulletin for commercial growers, we published it on rotary funds--sold it for 15 cents a copy, and last week had only 1,000 copies left from the 10,000 copies printed last January.

3. If possible, separate control data from basic descriptive data.

Control data changes rapidly; the basic data does not. For instance, this year we will print a 16-page supplement to our fruit spray bulletin to bring up-to-date the control tables contained in the original volume. This supplement will be furnished free to growers.

4. Wherever possible, plan and print bulletins in supplies sufficient for several years.

5. Work with your editor in achieving bulletins with economical number of pages---4, 8, 16, 32 and 48.

6. Remember, your demand for bulletins in large quantities comes from home gardeners and homemakers. If you've properly analyzed your problem, you will have available a supply of short, to-the-point leaflets----cheap to produce---to meet this demand. We found, for instance, that 75 percent of the requests for an 80-page bulletin on home fruit gardens were from folks interested in strawberries. The strawberry section was only about 8 pages. We now have a separate 8-page bulletin on strawberries, another bulletin on bush fruits, and in production, a separate bulletin on grapes.

So, to summarize the bulletin story---in addition to the four "IZE" we've discussed, let's add the four "I" marks of a good bulletin:

IDENTITY---as to subject covered, audience concerned, issuing institution. All of this concerns the cover.

INTEREST---about things in which people are interested, and information they want; good illustrations that help tell the story.

INFORMATION---after all, if the bulletin doesn't dispense data, answer questions, and help educate, it is of little consequence.

INTELLIGIBILITY---easy to read and understand, with simple words, short sentences, short paragraphs.

Applying the principles of the formula makes for effective use of radio just as it improves the planning and production of bulletins.

With radio, your audience tends to be general, unless it has been trained to listen at specific times for specific information. But you do have an audience. Our surveys this year in Ohio counties indicate that 95 percent of the farmers listen regularly to farm radio programs. More listen at noon than in the early morning hours, but you have a sizeable audience either time.

Your audience, however, may not be as attentive when listening to the radio as when reading a bulletin or newspaper. Hence, your information must be more general, avoiding complicated words, formulas and lengthy recommendations. In this sense, radio plays a more important role in alerting people to problems and arousing their interest in learning what to do about them than it does in offering solutions.

For this same reason, you must avoid trying to cover too much territory in a single broadcast. Five to seven minutes on a single subject is better than the same amount of time on three subjects.

Good radio depends upon being personal, using plenty of word pictures, being sincere, and maintaining interest. Our experience is that specialists do a more effective radio job if they talk from an outline or from leading questions than from a completely prepared script.

There are many ways, too, to use radio. We use at least four in Ohio and continually are looking for others. Here is what we do:

1. Live interviews, where the specialist appears as a 5 to 7 minute feature on a live show.
2. Recorded interviews, either made in the studio or on-the-scene. This latter device helps immeasurably to inject more action, color and interest into the broadcast.
3. Prepared releases, based on subject matter and written for use by announcers or farm radio directors on commercial stations.
4. Special services. In this category, we would include such radio activities as our annual fruit spray service, which is similar to that used in several other states. Here is how it works in Ohio: During the apple scab season, our pathologist prepares a 150- to 250-word report twice a week based on his studies of apple leaves submitted from all over the state. This is furnished to the state bureaus of the three wire services--AP, UP and INS---and these services transmit the report over their teletypes to every radio station in the state for use the following day. Success of such a venture is dependent upon doing at least these things:
 1. Preparation of the report in easy-to-read, easy-to-understand language.
 2. Making sure the wire services will handle it regularly in accord with an established schedule.
 3. Alerting the radio stations as to what it is, and learning the actual time they expect to broadcast it.
 4. Advising county agents of stations and times the information will be broadcast. They, in turn, can advise their fruit growers by letter, or through the local newspaper, when it can be heard.

We have tried to improve the over-all service by giving the radio stations a glossary of terms---what they mean and how to pronounce them ---and suggesting that, in all cases, the report be broadcast in conjunction with the weather forecast. Where stations were not getting adequate weather forecast information, arrangements were made with the nearest weather office to supply this data.

After the scab season is past, we continue a mail service, once or twice a week as conditions dictate, of a short, up-to-the-minute report on insect infestations and control measures. As with the scab report, we do not attempt to give specific control measures, but report conditions, and make direct reference to specific pages in the fruit spray bulletin. This service has been extremely successful, has had a good listening audience, and all a station manager had to do to convince himself of this was to omit the broadcast one time. Where this has happened---never intentionally, but because of wire transmission failures, or misplacing of the report---the stations were flooded with telephone calls.

We also have had good success in supplying outlying stations with regular programs, recorded on tape. This year, for instance, we prepared a two-program tape to support the Ohio Quality Wheat Program. One program was on varieties to plant and seedbed preparation; the other was on what the farmer could do to help eliminate his wheat disease problems.

Effective as radio is, however, we must not forget its limitations. It is used most effectively as a means of alerting, of arousing and maintaining interest, and of promoting reading of bulletins and attendance at meetings. It is a dangerous medium for giving specific control recommendations involving several chemicals and critical measurements of formula ingredients.

One example may prove my point. For several years, I never had been able to raise squash--the vine borer always keeping one jump ahead of me. One day, rather than consult the bulletins available, I asked our entomologist, over the telephone, what I should do about the squash and several other plants. He gave me the information, but I got his recommendations twisted in my mind....went home, carefully mixed a spray solution of DDT and gave my squash a full application. Well, you know the answer----I didn't have any more worries about the borer....but, of course, I didn't have any squash, either. The same thing can happen in radio---if you put too many things, and too specific instructions, into a single program.

Well, we're getting along with our story...and we still haven't discussed television. How many of you have done television programs? Many of you I know have not yet had the facilities available to do educational programs on TV, but if you have had the opportunity and let it pass, you've passed by a wonderful medium for arousing interest in your field and doing an effective educational job.

Of course, a television expert these days is anyone who has done a single program. But, although we've done some 200 programs in the past 30 odd months, we don't claim to be experts. Many of those programs, however, have been on insects and diseases, have been some of our most successful programs, and, here's good news for you, have been some of the easiest of all to make effective.

Since in entomology and plant pathology you deal, primarily, with small things, most of your visual material can be your actual stock in trade----insects, damaged plants, small containers of insecticides and fungicides, hand sprayers and dusters.

Because television is a visual medium, you can show insects and damages even better than you can in a bulletin. The TV camera, on closeups, can actually magnify real insects at work on a leaf or in a stem. On one program, we exhibited closeups of sweet corn stalks. The entomologist showed the outward evidence of corn borer damage, predicted where he would find the borer in the stalk, cut the stalk open, and there was Mr. Borer, six times as big as life, munching away. Such a performance is dramatic; it packs a wallop.

Rather than go into the theories of visual education and their application to television, perhaps it would be better just to review for you a few of our experiences with different visuals.

SLIDES (35 mm)--Most of you have taken photographs for and used 2x2 slides in your work. You will find that those you have can be used on television. Either black and white or color slides are satisfactory, if the exposure is good. Of course, on black and white TV, you lose the color detail and discrimination of your color slides. Main objections to slides are these: You can't introduce action; you must work on a cueing system for showing them, as you have no physical control on them on a TV show.

PHOTOGRAPHS--8x10 enlargements, on matte finish paper, are good on television, particularly if you have them mounted on stiff cardboard, and animate the pictures by pointing out as you go along certain things with your finger or a pencil. Avoid pictures with too much detail.

LINE DRAWINGS--Any type of line drawing will work on TV, either using the original art work or a copy. If you're making something especially for TV, do it with black ink on a light gray or light blue cardboard. We've found both positive and negative photostats, properly mounted, can be used satisfactorily. Again, line drawings are most effective if animated with a pencil or your finger. Better yet, use a line drawing, partially complete, and complete it on the air. You can trace in your guide lines in advance with light blue pencil and they won't show.

CHARTS, GRAPHS--Simple, bold charts and graphs are good; but better yet if completed while on the air, or otherwise animated to inject action.

MOVIES--As with slides, 16 mm. motion picture films can be used. Short film sequences, which you narrate yourself, are more effective than complete movies. Complete movies offer you little leeway as to time---you can't compress or expand...and often while the picture tells the story you want told, the sound-on-film narration may be entirely foreign to the point you wish to make.

We have used quite successfully short sequences of film showing what happens inside a bee hive. These films were made by our bee specialist, who described the action while the film was running. Films used in this way, or made for this purpose, are relatively inexpensive, compared to the terrific costs of making complete movies.

OBJECTS (LIVE OR INANIMATE)--As we've said previously, objects themselves are good. Remember, however, to show light objects against a dark background, and vice versa...as well as to hold or display the object so the camera, and in turn the viewers, see the point being made. This also prompts the reminder that all action on TV must be slow, allowing cameras time to follow, get focused on and show a particular scene before moving on to the next. This points up the necessity of doing in TV the same as on radio-----concentrate on making a few main points---don't do too much.

We could go on at this point and reconstruct for you the general format, content and props used on some of our television shows in your fields, but as with bulletins, radio and television, in a speech or talk, it often is a mistake to try and do too much. We've covered a lot of territory in developing the subject "Making the Best Use of Bulletins, Radio and Television."

If we were to repeat anything for emphasis, it would be this: No matter what you're trying to do----Figure out the audience--Visualize; determine the best means of reaching the audience--Analyze; decide which facts are important to the audience---Organize; and then present them in the most interesting, effective way possible---Dramatize. This the best general purpose formula I can give you.

